

**RANGE EXTENSIONS OF NEW WORLD TORTOISE BEETLES
(COLEOPTERA: CHRYSOMELIDAE: CASSIDINAE)**

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Abstract.—New country records with localities are provided for 63 species of New World Cassidinae. Data are based on specimens in the National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A. Host plant data from specimen labels, including several new records, are reported for some species.

Resumen.—Se sumistran nuevos registros para algunos países con localidades para 63 especies de escarabajos cassidines americanos. Los datos estan basados en la colección del Museo Nacional de Historia Natural (E.U.). Se sumistran datos de plantas hospedadoras a partir de etiquetas de algunos especímenes, incluyendo nuevos registros.

Key Words: Chrysomelidae, Cassidinae, distribution, host plants

The subfamily Cassidinae was recently catalogued by Borowiec (1999). By updating taxonomic names and providing known host records, distributional data, and a bibliography, Borowiec established a baseline for further research on the Cassidinae. The large collection of Cassidinae at the National Museum of Natural History, Smithsonian Institution, Washington, DC, was not personally examined by Borowiec in the preparation of the catalogue. The strength of this collection is in its representation of New World material. Based on my examination of specimens, I here provide data that extend the distributions of 63 New World species in 15 genera and give available associated host plant information.

METHODS

Names follow Borowiec (1999) with genera and species listed in alphabetical order. Data are given as on labels, with the month of collection in roman numerals and the number of specimens in parentheses.

Plant data from specimen labels are indicated and discussed. Data are limited to species which I could identify. Dissections or type examinations were not done to confirm names.

New Range Extensions in the
Subfamily Cassidinae

Agroiconota propinqua (Boheman).—Known distribution: Colombia, Costa Rica, Cuba, Nicaragua, Panama. New records: Dominican Republic: San Cristobal, 26.VII.1917, coll. H. Morisson (2); N. of San Cristobal, at Blanton Mine, 26.VII.1917, coll. H. Morisson (54); Santo Domingo, 10.VI.1934, coll. S.T. Danforth (2); La Toma, N. of San Cristobal, 9-10.VI.1969, colls. Flint & Gomez (1); S. Domingo, Guaiamati, VII.1925, coll. H.E. Box (2); Haiti: Pt. Au Prince, coll. R.J. Crew (12); Pt. Au Prince, VIII.1920, coll. G.N. Wolcott. Jamaica: Chapinand, 13.VIII.1935, coll. Blackwelder (20); Kingston, IV.1906, coll. V. Duzee (2); Green Hills, 28.XI.1961,

coll. A.B. Gurney (1); Cockpit City, 13-20.XII.1966, coll. J. Maldonado (2); Spanish Town, on prison farm, ex sweet potato [Convolvulaceae], 5.VI.1917 (1). USA: Puerto Rico: Peñuelas, IX.1960, coll. M. Santiago (4). Venezuela: El Limon, AR 450 m, 18.VIII.1951, coll. F. Fernandez (1).

Agroiconota subtriangularis Spaeth.—Known distribution: Peru. New record: Bolivia: Coroico (1).

Agroiconota tristriata (Fabricius).—Known distribution: Argentina, Brazil, French Guiana, Paraguay, Peru, Suriname. New records: Venezuela: Suapure, Caura, 21.XII.1899, coll. E.A. Klages (1); Orinoco, Caura River, coll. S.M. Klages (1).

Charidotella (Xenocassis) puella (Boheman).—Known distribution: Belize, Colombia, Costa Rica, Ecuador, Mexico, Nicaragua. New records: Peru: Omaguas, coll. F. Knab (16). Honduras: Tela, coll. W.M. Mann (1), in banana thrash, 10.X.1935, coll. R.L. Trigg (1); La Ceiba, 22.XI.1915, coll. F.J. Dyer (1); La Ceiba, 19.IV.1911, coll. F.J. Dyer (1); Tegucigalpa, 3.IV.1917 (1); Tegucigalpa, 5.IV.1917, coll. F.J. Dyer (2); Tela, ex sweet potato [Convolvulaceae], coll. W.M. Mann.

Discomorpha (Discomorpha) biplagiata (Guérin).—Known distribution: Brazil, Colombia, Mexico. The record from Mexico is questionable (Borowiec 1999). New records: Ecuador: coll. F. Campos (13); on floor of banana hold, 16.IV.1936, coll. Scott (1); Chiquinita (2); El Salado, coll. F. Campos (10); Guayaquil, coll. F. Campos (2). Venezuela: Suapure, Caura River, 1.VII.1899, coll. E.A. Klages (10); Suapure, Caura River, 12.V.1900, coll. E.A. Klages (1).

Discomorpha (Discomorpha) metallica (Guérin).—Known distribution: Bolivia, Brazil. New record: Peru: Satipo, IV.1944 (1).

Discomorpha (Discomorpha) miniata (Boheman).—Known distribution: Colombia. New record: Trinidad: coll. Wells (1); Siparia, I.1936 (4).

Discomorpha (Discomorpha) variegata

(Linnaeus).—Known distribution: Caribbean, French Guiana, Suriname. New records: Guyana: Georgetown (1); Blairmont Plantation, coll. H.E. Box (3).

Discomorpha (Vulpia) fryi (Spaeth).—Known distribution: Peru. New record: Bolivia: [no additional data] (1).

Dorynota (Akantaka) bivittipennis (Boheman).—Known distribution: Brazil. New records: Peru: Huanuco, X.19?? (pin obscures data), coll. A. Miller (1); Tarapato, V-VIII.1886, coll. M. de Mathan (1).

Dorynota (Akantaka) distincta (Baly).—Known distribution: Ecuador. New records: Bolivia: Chapare, coll. Zischka (1); Santa Cruz, Buena Vista, Tax, 10.III.1951, coll. A. Martinez (1).

Dorynota (Akantaka) viridisignata (Boheman).—Known distribution: Argentina, Bolivia, Brazil. New record: Paraguay: Alto Paraguay, Emboscada (1).

Dorynota (Dorynota) nodosa (Boheman).—Known distribution: Colombia, Panama. New records: Venezuela: Suapure, Caura River, 18.I.1900, coll. E.A. Klages (1); Cua, Estado Miranda, coll. C.H. Ballou (2).

Dorynota (Dorynota) pubescens Blake.—Known distribution: Dominican Republic. New records: Haiti: 3.III.1950, coll. G.N. Wolcott (11); Constanza, 3–4000 ft, VIII.1938 (1).

Echoma (Echoma) bonfilsii (Boheman).—Known distribution: Ecuador, Peru. New record: Brazil: [no additional data] (1).

Echoma (Echoma) clypeata (Panzer).—Known distribution: Bolivia, Brazil, Ecuador, French Guiana, Guyana, Paraguay, Peru. New records: Venezuela: Suapure, Caura River, 4.VIII.1899, coll. E.A. Klages (1); Suapure, Caura River, 22.IX.1899, coll. E.A. Klages (1); Suapure, Caura River, 6-12.IX.1899, coll. E.A. Klages (1); Cojedes, San Carlos DEFORSA, 150 m, 7.X.1997, colls. C.J. Rosales, S. Kiefer & J. Segovia (3); Cojedes, San Carlos DEFORSA, 150 m, 9.X.1997, coll. C.J. Rosales (3).

Echoma (Echoma) quadristillata (Boheman).—Known distribution: Costa Rica,

Nicaragua. New record: Guatemala: Puerto Barrios, 24.II.1905 (4).

Eutheria piperata (Burmeister).—Known distribution: Uruguay. New record: Argentina: Buenos Aires, Biolujan Tigre, coll. Martinez (1).

Gratiana insculpta (Boheman).—Known distribution: Mexico. New records: Panama: Canal Zone, coll. G. Irenao (1); Canal Zone, rd to Corozal, IX.1912, coll. H.G. Irenao (2).

Metriionella angularis (Champion).—Known distribution: Costa Rica, Nicaragua. New records: Panama: Bocas del Toro, 3.VII.1908, ex *Ipomoea* sp. [Convolvulaceae], coll. W. Robinson (1). This is the first host plant record for this genus of 12 species.

Microtenochira aberrata (Weise).—Known distribution: Costa Rica, Guatemala, Nicaragua. New records: Honduras: La Ceiba, Rio Congrejal, south, 3.IX.1979, coll. G.V. Manley (1); La Ceiba, Rio Congrejal, south, 11.IX.1979, coll. G.V. Manley (1).

Microtenochira aciculata (Boheman).—Known distribution: Brazil. New records: Argentina: Misiones, San Ignacio, coll. Baden (1). Paraguay: Caagualu, Paso Yabai, 15.XI.1951, coll. Foerster (1).

Microtenochira aspersa (Champion).—Known distribution: Costa Rica, Panama. New records: Colombia: Nicanse, in banana debris, 7.XII.1936, coll. T. Charles (1). Guatemala: Quirigua, 7.V.1926, coll. J.M. Aldrich. Mexico: in banana debris, 8.XII.1936, coll. G.C. Martin (2); Oax, Tuxtpepex, IV.1934 (6); San Antonio, 5.III.1968, ex palm fronds [Aracaceae], coll. D. Johnson. Palms are probably an unreliable host plant record since records for 10 of the 104 *Microtenochira* indicate only dicotyledonous host plants. Also, the tribe Cassidini is not known to be a palm-feeding group.

Microtenochira bonvouloiri (Boheman).—Known distribution: Guatemala, Mexico. New records: USA: Texas, Brownsville, coll. Townsville (1); coll.

Wickham (3); Esper. Rch. (1); 24.VI.1938 (15).

Microtenochira diffinis (Boheman).—Known distribution: Bolivia, Colombia, Ecuador, French Guiana, Peru. New records: Guyana: Demerara, coll. R.J. Crew (1). Suriname: Kwakoepron, Saramacca R., 13.VI.1927 (1); Brokopondo District: Brownsberg Naturpark, Mazaroni Plateau, 4–500 m. 19–25.VIII.1982, Malaise trap, coll. W.E. Steiner (1).

Microtenochira fainairei (Boheman).—Known distribution: Bolivia, Colombia, Ecuador, Panama, Peru. New record: Brazil: Prov. Mato Grosso, 1866, coll. P. Germain (1).

Microtenochira plebeja (Boheman).—Known distribution: Nicaragua, Mexico. New record: Guatemala: with *Dracaena* cuttings, det. at Miami, 26.VIII.1969, coll. A.S. Mills (1).

Omaspides (Omaspides) clathrata (Linnaeus).—Known distribution: French Guyana, Guyana, Suriname. New record: Brazil: Para, Cachimbo, IX.1954, coll. M.A. Ivarenga (1).

Omaspides (Omaspides) ellipsigera Spaeth.—Known distribution: Brazil. New record: Peru: Achinamiza, 10.VII.1925 (1).

Omaspides (Omaspides) specularis Erichson.—Known distribution: Colombia, Ecuador, Peru. New record: Brazil: Hyutanahan, Rio Purus, coll. S.M. Klages (1).

Omocerus (Nebroma) scabrosus (Boheman).—Known distribution: Argentina, Brazil. New record: Bolivia: Isiamus, XII, coll. W.M. Mann (1).

Omocerus (Omocerus) aeruginosus (Boheman).—Known distribution: Brazil, Suriname, Venezuela. New records: Bolivia: Caranavi, coll. Denier (1); Nueva Moka, Gutierrez, XI.1951, coll. Prosen (2). Guyana: Blairmont Plantation, coll. H.E. Box (3).

Omocerus (Omocerus) bicornis (Linnaeus).—Known distribution: Brazil, French Guyana, Suriname. New record: Venezuela: Suapure, Caura River, 24.VI.1900, coll. E.A. Klages (1).

Omocerus (Omocerus) relucens (Spaeth).—Known distribution: Colombia. New record: Guyana: Blairmont Plantation, coll. H.E. Box (2).

Omocerus (Omocerus) taurus (Boheman).—Known distribution: Colombia, Cuba, Brazil, French Guiana, Guyana, Trinidad, Venezuela. New record: Jamaica: [no additional data] (1).

Omocerus (Paratauroma) casta (Boheman).—Known distribution: Costa Rica, Ecuador, Nicaragua, Panama, Venezuela. New record: Colombia: [no additional data] (1).

Omocerus (Paratauroma) caeruleopunctatus (Boheman).—Known distribution: Nicaragua. New record: Panama: [no additional data] (2).

Omocerus (Paratauroma) smaragdinus (Boheman).—Known distribution: Brazil. New records: Bolivia: Rurrenabaque, Beni, VII.1925, coll. G.L. Harrington (1); Rurrenabaque, Beni, X, coll. W.M. Mann (1). Colombia: Villavincencio, Meta, 18.VII.1938 (1).

Omocerus (Platytauroma) truncatus (Boheman).—Known distribution: Argentina, Bolivia, Brazil, Colombia, Paraguay. New record: French Guiana: Cayenne (1).

Orexita dolorosa Spaeth.—Known distribution: Amazonas. New record: Peru: Satico, II.1944 (2).

Orexita picta (Boheman).—Known distribution: Brazil. New records: Argentina: Misiones, 1947, coll. Heritier (1). Paraguay: Caaguazu, Paso Yabai, 15.XI.1951, coll. J. Foerster (4); Caaguazu, Paso Yabai, 26.XI.1951, coll. J. Foerster (1); Hohenau, X.1940, coll. Schade (1).

Orexita sp. New record: Guyana: [no additional data] (2). This is the first record of the genus in Guyana.

Spaethiella miniata (Boheman).—Known distribution: Colombia. New record: Panama: Barro Colorado Is., Canal Zone, 29.XII.1928 (1).

Spaethiella costipennis (Boheman).—Known distribution: Brazil, Ecuador, Peru. New record: Bolivia: Santa Cruz, Buena

Vista, Tacú, 10.III.1951, ex Marantaceae, coll. A. Martinez (1). This is probably a valid host plant since other *Spaethiella* species and closely related tribes are monocot feeders. Host data is known for only 3 of the 33 *Spaethiella* species and these are in the Arecaceae.

Spaethiella erhardti (Boheman).—Known distribution: French Guiana, Suriname. New record: Peru: Amazon Center for Education and Environmental Research, 28.III.1999, colls. M. Lawson & D. Krabill (1).

Spaethiella laevicollis (Spaeth).—Known distribution: Colombia. New record: Venezuela: Caracas Valley, 20.IV.1922 (2).

Stolas acuta (Boheman).—Known distribution: Brazil. New record: Paraguay: 1900, coll. Cosset (1).

Stolas aenea (Olivier).—Known distribution: Brazil, French Guiana. New records: Paraguay: Sapucay, coll. W.T. Foster (2); San Bernardino, coll. K. Fiebrig (1).

Stolas consanguinea (Kirsch).—Known distribution: Peru. New record: Ecuador: Chiquinola (1).

Stolas conspersa (Germar).—Known distribution: Brazil. New records: Paraguay: Bernardino, coll. K. Fiebrig (6); Villarica, II.1922, coll. P. Jørgensen (1).

Stolas festiva (Klug).—Known distribution: Argentina, Bolivia, Brazil, Uruguay. New records: Paraguay: Col. Independencia, 23.III.1951, coll. Foerster (2); Caaguazu, Paso Yabai, 15.XI.1951, coll. J. Foerster (2); S. Estanislao, coll. Schade (1. USNM); Hohenau, III.1953, coll. F. Walz (3); Hohenau, coll. Schade (2); Hohenau, coll. Podtiaguin (2); P. Lopez, coll. Podtiaguin (5); Colonia, San Lazaro, Rio Apa, coll. Podtiaguin (1).

Stolas ignita (Boheman).—Known distribution: Brazil. New record: Argentina: Misiones, IX.1947, colls. S. Javier, P. Londero & Monrós (1).

Stolas implexa (Boheman).—Known distribution: Brazil. New record: Uruguay: Cerro Largo, Frail Muer. to Flossdorf (1).

Stolas inaequalis (Linnaeus).—Known

distribution: Brazil, Suriname. New records: Guyana: Georgetown (1). Venezuela: El Dorado Bo, 100 m, 25.VIII.1954, coll. C.J. Rosales (2).

Stolas isthmica (Champion).—First host plant data: ex *Ipomoea* sp. (3); ex *Ipomoea purga* (1) (Convolvulaceae); and ex *Xanthosoma sagittifolium* (L.) Schott and Endl. (Araceae) (3). *Ipomoea* is probably a valid host since it is a common one for many cassidines. Among the 170 *Stolas* species, host data is known for only 14 species and 8 of these are recorded from *Ipomoea* spp. On the other hand, *Xanthosoma* is probably not a valid host record since derived cassidine genera like *Stolas* tend to feed on dicotyledonous host plants. The Araceae have not been recorded as a host for any cassidines.

Stolas lacordairei (Boheman).—Known distribution: Argentina, Brazil, Paraguay, Uruguay. New record: Chile: Sta. Lucia, San José, 1935, coll. E.P. Reed (7).

Stolas quatuordecimsignata (Boheman).—Known distribution: Bolivia. New record: Peru: Sta. Rosa Convencion, 1936, coll. J. Soukoup (6).

Stolas subcaudata (Spaeth).—Known distribution: Paraguay. New records: Argentina: Salta, II.1941, colls. Oran, Tabillas & Martinez (1). Bolivia: Trinidad, Rio Ibare, 3.I.1948, coll. Kuschel (1).

Stolas submetallica (Weise).—Known distribution: Peru. New record: Bolivia: Chapare, 400 m, coll. Zitschka (1).

Stolas punicea (Boheman).—Known distribution: Belize, Guatemala, Mexico, Nicaragua. New records: Honduras: Loncotilla, 31.I.1928, coll. P.C. Standley (1); La Ceiba, 23-30.V.1978, coll. G.V. Stanley (4); La Ceiba, 10.VI.1978, coll. G.V. Stanley (5); La Ceiba, 1916, coll. F.J. Dyer (1).

Stolas tristigma (Boheman).—Known distribution: Belize, Brazil, Guatemala, Honduras, Mexico, Nicaragua. New re-

records: Argentina: Chaco, Resistencia, coll. Monros (1). Paraguay: [no additional data] (1); Chaco Dpto., Boquerón, 18.XII.1959, coll. Foerster (2); Hohenau, Col. Independencia, 23.IV.1951, coll. Foerster (2); Puerto Pinosco, coll. Podtiaguin (2); Caa-guazu, Paso Yobai, 13.X.1951, coll. Foerster (1).

Syngambria andreae (Boheman).—Known distribution: Bolivia, Brazil. New record: Paraguay: Hohenau, X.1940, coll. Schade (4).

Tapinaspis wesmaeli (Boheman).—Known distribution: Colombia, Costa Rica, Guatemala, Mexico. New record: El Salvador: Lake Coatepeque; 19.VII, colls. G.F. & S. Hevel (1).

DISCUSSION

The records reported here document extended distributions of these species. Borowiec's (1999) catalogue is an invaluable reference and serves as a basis for further systematic and biological work on the Cassidinae. Additional range extensions and other biological data are expected for cassidines as existing collections are examined and new collections are made.

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